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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/809,500

03/26/2004

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EXAMINER

SHEWAREGED, BETELHEM

ART UNIT

PAPER NUMBER

1794

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/809,500	Applicant(s) TAMAGAWA ET AL.	
	Examiner BETELHEM SHEWAREGED	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's response filed on 01/23/2008 has been fully considered. Claims 1 and 3-9 are amended, claims 2 and 10-13 are canceled, and claims 1 and 3-9 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto (US 6,387,478 B2) in view of Nakamura et al. (US 2003/0082473 A1).

4. Fujimoto teaches a color electrophotographic image receiving material comprising a substrate and a toner image receiving layer, wherein the substrate comprises a base paper and a resin layer provided on both surfaces of the base layer (abstract). The resin layer comprises polyolefin resin (col. 3, line 58). Fujimoto does not disclose a base paper as recited in the claimed invention.

5. Nakamura teaches an image receiving sheet comprising a base paper and a toner receiving sheet (abstract). The base paper comprises pulp fibers having fiber length of 0.40-0.70mm [0033] {instant claim 9}, fillers such as calcium carbonate and barium sulfate [0016] {instant claim 3}, sizing agents such as alkylketene dimer and epoxidized fatty acid amide [0018] {instant claim 8}, and a water-soluble high-molecular substance such as polyvinyl alcohol, carboxy-modified polyvinyl alcohol,

carboxymethylcellulose, hydroxyethylcellulose, cellulose sulfate and gelatin [0023] {instant claim 5}. The amount of polyvinyl alcohol is 1.0g/m² {instant claim 4} and the amount of calcium carbonate is 0.8 g/m² [0187] {part of instant claim 1}. The base paper undergoes calendar treatment with a roller at a surface temperature of 90-160 degree C [0036] {instant claims 6 and 7}. The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference of Nakamura teaches all of the claimed ingredients of the base paper, and process limitations of the base paper including calendaring. Therefore, the claimed effects and physical properties, i.e. a moisture content of the base paper would implicitly be achieved by a composite with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

6. Fujimoto and Nakamura are analogous art because they are from the same field of endeavor that is the electrophotographic recording medium art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the base paper of Nakamura with the invention of Fujimoto so as to improve the quality of the toner image.

Response to Arguments

7. Applicant's argument is based on that the passages identified by the Official Action relates to sizing agents and fixing agents, and Nakamura does not necessarily

disclose that at least one of an alkali metal salt and an alkaline earth metal salt should be present in the base paper. This argument is not persuasive because the base paper comprises calcium carbonate and barium sulfate as the fillers, and the calcium carbonate and barium sulfate meet the claimed alkaline earth metal salts. [0012] thru [0061] teach detailed description of the base paper of Nakamura. [0033], [0016], [0018], [0023], [0187] and [0036] were used to pinpoint the specific disclosure within the reference upon which the Office relies that teaches the claimed base paper.

8. Applicant further argued that Nakamura does not teach that the salts may be present in an amount of 0.6 to 3 g/m². This argument is not persuasive because 0.8 g/m² of calcium chloride is present in the base paper (see Example 1 [0187]).

9. Applicant further argued that Tashiro cannot remedy the deficiencies of Fujimoto and Nakamura for reference purposes so as to suggest to one skilled in the art to provide a base paper with a moisture content from 6.5% to 8.5%, also argued that Tashiro cannot remedy the deficiencies of Fujimoto and Nakamura for reference purposes so as to suggest to one skilled in the art to provide a base paper with a salt arranged of from 0.6 to 3 g/m². Applicant also redirects Examiner's attention to Tables 1 and 2 to show that the claimed invention exhibits unexpected result. These arguments are not persuasive for the following reasons. With respect to the amount and presence of the salt in the base paper, Nakamura expressly teaches that 0.8 g/m² of calcium chloride is present in the base paper (see Example 1 [0187]). Tashiro teaches the advantage of limiting the moisture content of a paper between 1.8% and 7%, and in the previous Office Action the teaching of Tashiro is used as a suggestion or motivation to optimize the value of the moisture content; however, in view of Applicant's comments

and the disclosure of Tables 1 and 2 of the specification, the teaching of Tashiro has been withdrawn.

10. With respect to the moisture content, reference of Nakamura teaches all of the claimed ingredients of the base paper, and process limitations of the base paper including calendaring (see 35 USC 103 rejection above); therefore, the moisture content of the base paper would implicitly be achieved by a composite with all the claimed ingredients.

11. For the above reasons claims 1 and 3-9 stand rejected.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BETELHEM SHEWAREGED whose telephone number is (571)272-1529. The examiner can normally be reached on Monday-Friday 9am-5pm.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BS
April 30, 2008.

/Betelhem Shewareged/
Primary Examiner, Art Unit 1794.